THE JOURNAL OF SCHOOL HEALTH

VOL. X NO. 1

JANUARY
1 9 4 0

Pauline Brooks Williamson,
School Health Bureau, Welfare Div.,
Metropolitan Life Insurance Co.,
New York, N. Y.

PUBLISHED BY
THE AMERICAN SCHOOL HEALTH ASSOCIATION

AMERICAN SCHOOL HEALTH ASSOCIATION

Organized 1927

Devoted to the interests and advancement of those engaged in school health activities and the services rendered by them.

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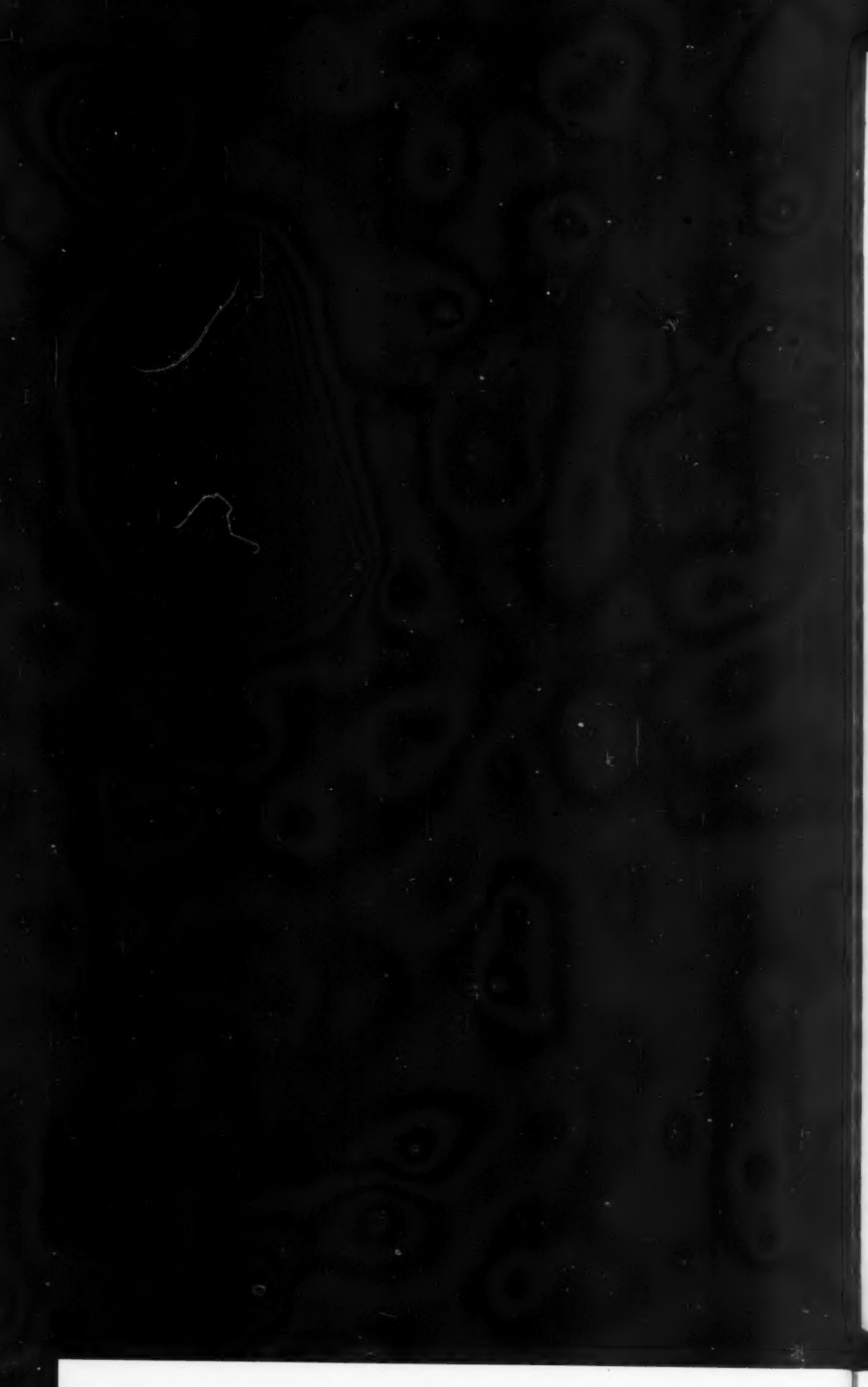

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Published monthly, except July and August, at Buffalo, N. Y.

THE AMERICAN SCHOOL HEALTH ASSOCIATION
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SUBSCRIPTION RATES TO THE JOURNAL
Membership dues, $2.00, including $1.75 subscription. Subscription $1.75.
Single copies 25c

Address all communications to
THE EDITOR, 3335 Main Street, Buffalo, New York

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Entered as second-class matter at the Post-Office at Buffalo, N. Y.
October 5, 1937

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Vol. X JANUARY, 1940 No. 1

FREQUENCY OF PERIODIC HEALTH EXAMINATIONS

By JAMES FREDERICK ROGERS, M.D., Dr.P.H.

United States Office of Education, Federal Security Agency, Washington, D. C.

In preparing a review of Medical Inspection in the United States for the Health Section of the League of Nations, the Office of Education sent a request for information concerning their present practices to the school physicians of a dozen representative cities. Among the questions was one concerning the frequency of periodic examinations, and it was a surprise to find that there were as many different schedules as there were cities. Apparently the experienced directors of medical service in those cities all differed in their ideas as to the grades in which examinations should be given. In three of these cities the medical service differed with the law of the State which requires an annual examination. As you are aware, the White House Conference recommended an annual examination, but only one of these cities was following that recommendation. On the other hand, a Committee of the American Public Health Association recommended an examination "at entrance and at least once thereafter . . . the second examination to occur in the fifth or sixth year"; with, "if possible, a third examination in the eighth or ninth." Here was another variety to be added to the twelve reported, for in none of the cities, were examinations so infrequent as two, and the two in which three grades were examined did not correspond in their selection with the recommendation of this Committee. In a recent book on Public Health Administration, the author, who is not a school medical officer, makes a choice of three grades which does not coincide either with those of the cities, or the committee of the Public Health Association. Apparently both the doctors and the professors of America are in considerable disagreement in this matter.

In England and Scotland where they have been longer in the business the number of routine examinations, from the first, were three: On entrance, (usually at five years); at eight, and at twelve years. Sometimes it is at entrance; at nine and at thirteen years. They do not select by grades. In London the number was increased to four; on entrance, at seven years, at eleven years,

Paper presented on Oct. 16 before American Scool Health Assn., Pittsburgh, Pa.

and on leaving school. In Paris, on the other hand, an examination is given annually which brings us back to the recommendations or requirements of fifteen of our State laws and of the White House Conference.

Why all this variety of practice? Why this seeming disagreement in theory? If only two or three examinations are needed in a school life, why spend time and public funds on more examinations? If annual examinations are desirable, why reduce them to two, or three, or four? The reasons for this thickened plot, affecting the health of the school child, seemed to deserve investigation. We accordingly wrote to a number of directors of school health services for the theories back of their practices. One of these directors answered:

> "While the State law requires annual examinations of all pupils enrolled, it is impossible with the personnel available to comply with such a law. To comply with the law would mean too rapid examination, which would make it a farce."

In a city where examinations are made annually the chief medical officer writes:

> "I would be opposed to making our routine examinations less frequently. New diseases and defects are constantly developing in children as they grow older. . . . and I would not like to see any of these conditions arise, and the child suffer from them, by reason of lack of a school medical examination which costs only about 25 cents, based on the calculation of six minutes per examination by a medical inspector receiving four cents per minute."

Another physician, who examines five grades, writes:

> "If we are to put into practice the philosophy of modern preventive medicine, constant medical supervision is almost axiomatic. We cannot avoid it if we would discover deviations from the normal in their beginning stages, and thus prevent them from developing into real abnormalties. Defects have no relation to grades; they are often the result of communicable disease and they develop unbeknown to pupil, parent, or teacher."

Another school officer said:

> "With ample personnel, routine medical examinations should be made in each grade annually. Lacking such a staff the 1st, 3d, 5th, 7th, 9th and 11th grades offer the best opportunities, following preschool entrance examinations."

In a school service headed by a distinguished pediatrician who is content with his personnel, except that he could use one more part-time worker, five grades are examined and the average

time devoted to examinations is five minutes, which does not include dental examinations. It is evident that this physician has personnel for examinations only in these five grades.

Another physician of long experience writes:

> "I would rather see better examinations given in a few selected grades than a horizontal spread of too often ineffective gestures. If I must be dogmatic I would select the kindergarten, 1st, 3d, 6th, 7th and 10th grades. With ample personnel of physicians, and with nurse assistants at the time of examinations, we could probably accomplish more for the same amount of money in this way than where the children are inspected every year in a deadly routine manner. But those cases of urgent defects found at *any* examination should be repeatedly re-examined until correction has been obtained. Just how often these re-examinations should be made cannot be standardized to any advantage."

Abroad, as we have already noted, the examinations have been increased in London from three to four, and there has been agitation recently by social workers for more frequent examinations. In conversation with the School Medical Officer of Edinburgh two years ago he said that while they make only three routine examinations, he would like to make them annually.

The accompanying table presents the various schedules followed or recommended by our correspondents, by committees, or other authorities: (It does not include three important cities where examinations are made by teachers or nurses.)

Grades

K	1	2	3	4	5	6	7	8	9	10	11	12
	x	x	x	x	x	x	x	x	x	x	x	x
	x	x	x	x	x	x	x	x	x			
	x	x	x	x	x	x						
x or x			x			x		x		x	x	
x or x			x		x				x		x	
	x		x		x		x		x			
x		x		x		x		x				
x		x		x		x			x			
x			x				x		x		x	
x			x		x				x			x
x				x			x			x		x
	x			x			x					
	x			x				x				
	x		x		x		x		x		x	
x or x			x			x	x			x		
	x			x						x		
	x					x						

Grades in which physical examinations are made in various communities or recommended by various authorities.

It will be noted that all were agreed on examining children of the first grade and some of our correspondents insisted on the examination of all entering pupils without regard to placement. This is very important, for otherwise a considerable percentage of children never are examined, either because they were absent "on the day the doctor visited the school," because they did not attend the school in the grades selected for examination, or because they came from another community.

A few correspondents gave reasons for their choice of grades other than the first. For example, the fourth grade was selected because in this grade (says one physician) "malnutrition is likely to occur" and because dental hygiene is extremely important at this time. These statements hardly deserve comment. Another physician selects the sixth grade because "children are approaching the pre-adolescent period and should be examined with this in mind." Just when does pre-adolescence begin? What is meant by "approaching"? and just why should this be an important time for health examinations anyhow? Another would examine in the ninth grade "because adolescence is at hand." This theorist overlooks the fact that puberty and rapid development, which he probably means by adolescence, does not begin in the same year for boys and girls, and that besides, there is a spread of at least six years in the ages of children in this grade. Such recommendations for choice of grades are not convincing.

The last year of school is mentioned as an especially desirable time "because the average student is about to enter upon his occupational career." An examination at entrance to high school, with reference to vocational choice would seem to be of more importance, although the record of the student's previous examinations, and interim observations, should prove sufficient in any but a few cases.

Entrance to junior and senior high school is suggested as suitable occasions, but there is a wide range of age and physical development at these times.

The frequency of communicable disease and the incidence of defects which follow them, tend to diminish with age, although some defects increase or become more evident. Otherwise, their appearance, as one of my correspondents stated, follows no law. Except for emphasis on the earlier years, the choice of grades, where resources do not permit of an annual examination, might as well be made by mathematical methods. So far as I know, there are no convincing reasons for any other method of spacing.

An average of six minutes per examination has been considered a minimum allowance of time. (Philadelphia, Des Moines, London). Given a certain personnel, and subtracting the examinations which can be secured by family physicians, the arithmetic of the number of grades which should be examined is simple.

If you wish to spend more time you must decrease your grades. One other item should be taken into account in the final calculation of what should be attempted, and that is, whether there is a nurse or other assistant for the keeping of records,—whether the testing of vision and of hearing is done by this agent, and whether (as should be the case) dental examinations are made by a hygienist or dentist (which examinations to be really effective should be done at intervals of six months.) The six minutes or more allowed for examination should not be contracted by needless clerical work on the part of the physician.

Periodic examinations, whether they come three times in a school life time—that is, with an interval of three or four years or whether they are made in every year, are more or less of an absurdity, and the less frequently they are done the stronger the accent falls on the "more", for diseases and defects do not await the quadrennial, triennial, biennial, or even annual visitation of the school physician. Diseases and defects may appear or become evident within a few days after that visit, and it is manifestly wrong that the diseased or defective child should await his return in from one to five years, before his condition is discovered.*

Health inspections can only be adequate if done daily and in the school we have one, and only one, agent who is present on the 200, 400, 600, 800, or 1,000 days between visits by the school physician, and who, if at all interested in the child, should "be able to recognize the child's 'usual' appearance and action and to note any departure therefrom." In any school system which is really concerned with the health of the child, the teacher will refer any pupil who deviates from the usual (the word normal might as well be abandoned) to the school physician even if he has examined that child routinely on the previous day. If the teacher has been adequately prepared in the training school or by the school physician, she will make all the better interim examiner.*

To review—there is great variety of practices and of recommendations for practice, in periodic examinations. That variety is accounted for by the effort of the school medical officer to do the best he can for his pupils, with the personnel at his disposal. Each is examining as many grades as he may, and yet spend as much time on each examination as he thinks needful for good service. In no case did that time fall below five minutes per child, as reported for the service headed by a pediatrician, and this did not include the dental examination, and in some cities as much as 12 minutes was reported.

I have already noted that some of these medical officers were not obeying the law requiring an annual examination. However, I believe that the universal answer to the inquiry concerning

* See Journal of School Health, Vol. IX, No. 6, June 1939, pp. 177, 179.

routine examinations would read, "We would make them annually if we had the facilities for doing them as deliberately as we think they should be done."

It seems to me that any law or recommendation on the subject should avoid a specific number of examinations and certainly the recommendation of two or three or four examinations is even less desirable than of an annual examination. I should prefer some such statement as—*Periodic examinations should be made in as many grades as personnel will permit of thorough-going work.*

Between examinations, any thorough-going health service must depend on the interest and observation of teachers trained by that service, and the more infrequent the routine examinations, the more we must depend on the teachers. Then there are examinations to be made of children returning after prolonged illness, and the re-examination of children already found in need of care.

Finally, it profiteth no one whether examinations are made daily, yearly, or otherwise if nothing is done about the treatable conditions, which are found in those examinations.

* * * * *

Scarlet Fever and Raw Milk,—A small outbreak of scarlet fever which occurred recently in the city of Hornell has again strikingly demonstrated the real purpose back of ordinances requiring the pasteurization of milk.

Under a local regulation, no milk except pasteurized may be sold in Hornell. All of those who became ill were city residents and all of the primary cases had used contaminated Grade B raw milk which they had procured from a producer-dealer, outside of the community, whose product was not subject to this protective ordinance.

Between October 5 and November 4, eighteen persons, including eleven adults, are known to have been attacked. Four of the eighteen were secondary cases. There were no deaths.

On October 3, the dairyman employed a new milker who at the time was not feeling well but nevertheless began work. On October 4 he complained of a sore throat but did not seek medical attention. On November 10, examination of a throat culture from this man showed the presence of hemolytic streptococci of the group commonly encountered in human infections.

Investigation of the herd on October 31 disclosed that one of the cows had a diseased udder. Hemolytic streptococci of the group commonly encountered in human infections were isolated by the State Laboratory from milk (a) from the left rear quarter of this cow's udder (b) from two containers already filled for customers and (c) from a forty-quart can. The cow was slaughtered on November 14 in the presence of a representative of the State Department of Health. Health News, New York State Department of Health, December 11, 1939, p. 204.

THE PART OF THE SCHOOL PHYSICIAN IN AN EFFECTIVE FOLLOW-UP PROGRAM*

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This paper is presented in order to bring to your attention a potent factor in the follow-up for the correction of defects. No procedure which gives promise of results should be overlooked, since staffs are limited and effectiveness depends upon complete use of all staff members. Physical examinations of school children by qualified physicians at stipulated times have been recognized for a long time as an essential part of the school health program. Previously the emphasis was placed on the examination of large numbers of children. Experience has shown that if this service is to be of greatest value, all possible defects must be corrected. Formerly, the nurse made a home call at her earliest convenience to interpret to the parents the physical findings, and to urge that action be taken to correct the remediable defects. At times she found it difficult to urge correction because of the failure of interest on the part of the parent who was occupied with household tasks.

The emphasis regarding physical examinations of school children has been changed within the last few years from large numbers of examinations to fewer and more thorough ones. An effort is made to see that parents are present for the examination of elementary children. In those districts where emphasis has been placed on parental attendance, there is an increased interest as evidenced by the greater number of parents present.

These considerations make it possible for the examining physician to take an active and effective part in the program for the correction of defects. It must be borne in mind that the examination is a health examination for the detection of deviation from the normal and not for the purpose of diagnosis such as would be given by the family physician.

The school physician makes an examination of a school child in the presence of the parent. This is a time when recommendations can be made most effectively for the correction of defects. The parent has evidenced an interest in what the findings are, and is in a receptive mood for advice. It is an opening for the physician to have a conference. At the time of the examination the physician can point out to the parent any gross deviation from the normal. At the conclusion of the examination, the child may be dismissed and a conference held with the parent regarding the

* Read at Annual Meeting, American School Health Association, Pittsburgh, Pa., October 16, 1939.

findings, what corrective measures could accomplish, or what would ordinarily be the result if corrections were neglected. The parent, wishing to be informed as to the physical well-being of the child, has made a special effort to be present. It is a matter of disappointment when the physician hurries through the procedure and is non-committal as to the findings. The parent develops the attitude that there is nothing to the examination, and wonders what the doctor knows about the child anyway. When the nurse makes a call at a later date to interpret the doctor's findings, she finds a parent in an uninterested frame of mind. The resistance thus developed must be broken down before it is possible to convince the parent that defects which need correction are present. On the other hand, when the examining physician takes a definite interest in each child whom he examines, the attendant parent evidences satisfaction and a greater desire to carry out recommendations. The physician is ideally equipped to discuss the findings so that the parent may understand the facts. There is an opportunity to ask questions as to the interpretation, and the physiology of the condition can be explained in such a way that the parent will see the need for correction.

At a physical examination, when a functional murmur is found, the physician is much better prepared to explain the situation to the parent so that there is no misunderstanding. When the condition found is infected tonsils, it is possible at the time to show the parent what the current condition is, explain to the parent just what is indicated and then to discuss with the parent what procedure it is advisable to follow. The physician is in a position to discuss the relationship of the tonsil findings with other conditions noted, namely the child's reaction to school work, the frequency of absence and other factors. These facts are of assistance in helping to determine the course of action. The information is given to the parent so that he may present the findings of the school examiner to the family physician. When this procedure is followed, the parent is intelligently informed regarding the reason for referral for correction, and a clearer picture can be presented to the family physician regarding the findings. It also eliminates a source of irritation with the family physician because the parent does not state that the school nurse said, "I must have my child's tonsils out." Any information given directly to the parent at the time of greatest interest will be more comprehensively understood because it is first-hand information. When it is necessary to wait until the nurse can make a home call, the information is no longer firsthand and much of the force of the advice is lost. The nurse may not have been present with the doctor at the time of the child's examination, and an adequate discussion is not possible, even if the physician goes over the findings in detail with the nurse at the close of the clinic and leaves written recommendations.

When the findings indicate that the deviations from the normal are caused by faulty health habits or a need for a revised school program, it is possible for the examining physician to make recommendations as to the practice of health habits and their great value in the maintenance of health. The physician can point out clearly the part that any patient must take in the correction of defects. Sound advice in building for a better understanding of the need for daily personal attention to better health practices can be presented, and the part that the individual has to take when medical advice is sought from the family physician can be fully explained. Here is an opportunity to dispel the idea that a visit to the family physician for the purpose of obtaining a handful of pills will completely correct the condition without any effort on the part of the patient. This is an attitude which seems to permeate the mind of the general public. Education as to the part health habits play in the individual's health, and the importance of conscientiously following the recommendations of the attending physician, is one of the greatest needs in our health program today. During the physical examination of the school child with the parent attending, this point can most effectively be stressed.

Posture advice given at this time is very important, for it is possible to call the attention of the parent to the needs of the child from the health habit standpoint, and to give advice regarding the mechanical devices which are on the market. The physiology of growth and its relationship to posture when adequately explained will help the parent to solve this question.

If the condition of the child is such that the school program should be modified, it is possible for the physician to make the necessary recommendation to the parents at that time. The matter can be discussed and arrangements made with the cooperation of the school personnel without loss of time. It does not require further contact by the nurse to explain the situation before arrangements are made. The importance of the part played by the family physician in guiding the child's home health program, also should be emphasized.

With this background of information regarding the child's needs, the parent frequently takes the initiative in the follow-up. At a home call from the nurse, if corrective procedures have not been instituted already, the understanding parent does not need interpretation of the findings, but only to be reminded that attention is advisable. In some instances help is all that may be needed in planning how to take care of the problem.

As an example, I should like to present the following case. Shortly after the opening of the school year a beginner was referred to the school nurse for attention. The child appeared to

be malnourished. An invitation was sent to the mother to attend a physical examination of the child when the first school clinic was to be held. The mother appeared, and when introduced to the school doctor she was aglow with pride. Her attitude was similar to that of an exhibitor presenting a blue ribbon product. The physician, however, upon examination found the child in a very poor physical condition and in need of care. There was no outstanding defect, the condition was seemingly the result of poor health habits. In order to break down the parent's unwarranted satisfied feeling, it was necessary for the doctor to use rather stern measures. Finally, however, the parent conceded the fact that the child was not in good condition. The parent took the child out of school and placed her out in the country where a rigid daily routine was carried out. The following year when the child re-entered school she was a normal healthy child. The mother was very appreciative of the marked improvement the child had made. There had been no follow-up call made by the nurse, for the physician had explained so explicitly the condition to the parent that additional urging was not necessary. The self-satisfaction of the parent would have been difficult, if not impossible, for the nurse to penetrate. It would have meant waiting for a break in the child's health, or a scholastic failure because of poor health, to convince the parent that the child needed physical care.

The principle of the physicians' explanation is important in the high school age group, but this information is given to the student rather than to the parent. More students at this age respond to this opportunity to have physical examinations when parents are not present. These students are reaching an age when they like to be considered able to make their own decisions. Guided by adolescent psychology, it has been found that the best results in this age group can be obtained by talking directly to the student at the time of the examination, without the presence of the parent. Youth has a habit of taking action into its own hands, and without its cooperation a good corrective program cannot be carried out. Many times an appeal to the student, with a complete interpretation, will encourage the student to request that the defect be given attention.

These junior and senior high school students have received instruction in health subjects and have a background of information so that the interpretation of findings to the student can be intelligently reported to the parent. The desire for correction of defects on the part of the student is amplified and the parent makes a greater effort to respond to the suggestions. It is an opportune time for individual health instruction. There is no subject in which the student is more interested than himself and his own development. The interest is there, and information given

by the physician falls on receptive ears. Information regarding deviations from the normal, together with reasons why attention is required, can be given directly to the high school student.

The desire for physical fitness from an athletic standpoint is a great factor in the corrective program of this age group. A girl in one of the high schools wished to take part in competitive sports, but found that she was unsuccessful. She requested a physical examination to see what she could do to build herself up. The physician found no defects except that her nutrition was poor. The findings were discussed with the student, and recommendations were made, which would increase both her strength and endurance. These recommendations were so rigidly followed that when the student was next examined her condition had improved sufficiently for her to take part in competitive athletics.

A number of examples of the value of giving recommendations directly to the boys examined for competitive athletics at a special program carried on in the Portland high schools this spring may serve to illustrate this point. In some instances, tonsillectomy had been recommended previously but the corrections were refused. The physicians explained to the boys what conditions were found and how they would affect their athletic capacities and future health. In several instances tonsillectomies were performed because the boys insisted that the parent have it done. The same condition existed regarding dental work. Students who had previously refused dental care had the needed attention when the value of such a procedure was sufficiently explained by the physician making the examinations.

Better corrective results are obtainable when the presentation of facts regarding the findings of the examining physician are made by the physician, and are of inestimable value in making the corrective program more effective.

* * * * *

Communicable Diseases of Childhood,—In the Statistical Bulletin of the Metropolitan Life Insurance Company for October, 1939, the following gratifying condition is disclosed:

Whooping cough, diphtheria, scarlet fever, and measles, ranking in the order named, together account for 4.5 deaths per 100,000 white policyholders, which is the lowest rate in the records of the Company for this period of any year. More noteworthy is the fact that each one has made an individual new record, except whooping cough, and even for this the rate for the nine months is only just above the minimum. The extraordinary achievements in this field of public health during the two past decades may best be judged by comparing this year's figures of 4.5 with the corresponding figure of 40.0, registered in the like months of 1921.

HOW CAN THE STATE DEPARTMENT HELP SCHOOL HEALTH PROCEDURES*

B. B. BAGBY, *M.D.*
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All up-to-date Health Officers and school physicians agree that one of the main factors in the promotion of health, the prevention of sickness, and the consequent prolongation of life, is the kind and the amount of health education given in the schools, and through them, in the homes. Therefore the thought and time properly spent by the health workers in school health education are well spent. In Virginia the Department of Health and the Department of Education work very closely together, and in this paper I shall try to bring out some of the fundamental principles we are endeavoring to stress to our health workers and teachers.

1. Schools are educational centers, and all activities in the schools should have as their chief objective the education of the children and the adults in the community.
2. Health service should be an integral part of health education, and should be preceded by health instruction and accompanied by it. As far as practicable, health service should be the culminating activity of health education. A good illustration of this is our plan of holding Diphtheria Immunization Clinics for pre-school children as a culminating activity of communicable disease studies. Our teachers in Virginia are no longer satisfied with their instruction about diphtheria if any little brother or sister of their pupils has not been immunized, and unless the family knows for what and why this is being done. The best teachers are not the ones who can make their pupils learn by heart their textbook, but are the ones who get them to put into practice in their daily living the things they learn. The Virginia Department of Health will send details and forms for such clinics upon request.
3. Of primary importance in any school health program is securing the interest of the teacher, the principal, and the supervisor. Unless the school physician can do this, the health program in the school will be only perfunctory. We are securing and maintaining this interest by stressing the following principles:
   a. The health of the school child while in school is the definite responsibility of the teacher, and will be a definite contribution to the success of the teacher. The teacher

* Read at Annual Meeting, American School Health Association, Pittsburgh, Pa., October 16, 1939.

keeps a record of the child's physical condition and past health history, and is given credit for every correction made.

b. The public health workers should let the teacher know that they are there to assist in the work and not to relieve the teacher of responsibility, certainly not to teach the health class.

c. The teacher must know the physical as well as the mental side of the pupil. To this end the Departments of Health and of Education have for years required a daily inspection of each pupil by the teacher for symptoms of illness, and at least two annual inspections for signs of physical defects.

d. The teacher must also know the home conditions of the pupils.

e. The teacher is given systematic instruction in health education. This is done:

(1.) In our colleges. The State Legislature in 1920 made it compulsory for every teacher to take a special course in health education before being allowed to teach in the public schools. This law is faithfully observed by our public schools and health authorities.

(2.) By personal instruction of the teacher by the Health Officer and nurse. The examination or inspection by the Health Officer or nurse should be for the benefit of the teacher as well as of the child, so that the teacher may know the significance of the findings and how to handle this and similar cases in the future.

(3.) By frequent publication and distribution of pamphlets by the Departments of Health and Education. Our School Health Manual gives in detail how teachers can make these inspections, and how to manage other details of the school health program that are too voluminous to dwell on in this paper, but will be sent to any interested person on request. I will quote a few paragraphs from this Manual as a sample of what we recommend about the physician's examination and the teacher's inspection. "Where there is a school physician, it is recommended that where every pupil cannot be *THOROUGHLY* examined every year, preference be given to those recommended by the teacher on account of suspected defects, those who fail to gain weight regularly, those who have been frequently absent on account of sickness, and those who have failed for promotion although they have attended regularly. At this examination, it is urged that the physician will spend his time in doing what the teacher cannot do, such as the examination of the heart, lungs, abdomen,

urine, taking blood for Wassermann, etc. If the physician does chiefly what the teachers can do in their annual inspection, the teachers are apt to lose interest in these inspections and will not have the same sympathetic understanding of the physical condition of their pupils."

"Contrary to the general impression of those unacquainted with the method of throat inspection by the teacher, this inspection is the easiest of all to make. Recently 1,903 children in the Peninsula district were inspected by the teachers and their findings recorded. The same children were examined by the Health Officer, who was a physician. The teachers found and recorded 299 defective throats and the Health Officer 321, or a difference on only 1.1%. Answers to the following questions often will eliminate the necessity of relying upon the throat inspection to obtain the proper information:

1. Have his tonsils and adenoids been removed?
2. Has a physician advised a nose or throat operation?
3. Does the child know that his nose and throat are all right?
4. Is he a mouth-breather?
5. Does he have an earache or a discharging ear?
6. Does he have a cold or sore throat more than three times a year?"

4. The school physician, nurse, and sanitation officer have an important place in our endeavor to make our courses of study more practical. All over the world educational authorities are trying to revise their courses of study so that a child may learn more readily the things he needs to know in conducting the everyday affairs of life as well as to be able to stand a good college entrance examination. What is more important to teach both boys and girls in our schools than the fundamentals of child care and training? The children in grammar grades enjoy working out a unit on this subject just as much as they do working out one on Holland, Japan, the Eskimos, or Transportation. But the teachers need suggestions and guidance from the Health Officers. In Virginia each year many other units of study are developed on practical subjects, such as sanitation, accident prevention, diphtheria immunization, summer round-up, and home-grown foods. When the public health workers cooperate with the teachers by suggesting practical units, furnishing literature on the subjects, and giving timely demonstrations, these units are most used and accomplish the most good.
5. The Departments of Health and of Education are constantly stressing the fact that both pupils and teachers learn by doing. For instance, the method of teaching first aid in Virginia a

few years ago was for an instructor to teach the American Red Cross textbook on First Aid. The pupils then took an examination, secured a certificate and finished the course while a special nurse was employed in the large schools to administer all the treatment. Now in some of our best schools a pupil who has taken the first aid course is detailed each period to render first aid under the instruction of the nurse. If no nurse is on duty in the school all the time, a book is kept giving the patient's name, his injury or complaint, the name of the first aid administrant and how the injury or illness was handled. The pupil thus learns by doing, and the nurse has a chance to check up on the methods used.

Finally, the Health Officer must try to promote adult education. The school system should be the center of both adult and child education.

In revising our courses of study and in promoting our school and community health program we can proceed no faster than the intelligent cooperation of the parents will permit. Therefore it is important that every school have a Parent-Teacher Association or some community organization, and connected with each classroom there should be a parent-study group, even if no more than one meeting is held. The health workers and the school physician can do much to encourage and develop these group meetings.

My time is up, so I shall have to stop. If, however, you would like to know more of our school health program, I shall be glad to send you our literature on the subject.

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Medical Treatment Not School's Responsibility,—"The multiplication of clinics for medical and dental treatment in certain schools is not evidence of progress in public health," writes Dr. Leigh F. Robinson, President of the Florida Medical Association. "It is rather a concession to expediency, and an acknowledgment that constructive community cooperation has not been developed."

Believing, however, that the schools have sufficient to do without indulging in medical treatment of school children, he urges that school officials provide, first, proper wholesome surroundings which include modern building and sanitary standards; second, necessary facilities for prevention, spread, and immunization against communicable diseases: third, a well balanced curriculum with thoughts against overloading, and with proper balance between mental and physical activities: fourth, adequate instruction in healthy living; and fifth, against the waste and misuse of public funds collected for educational purposes. Leigh F. Robinson, M.D., Florida Health Notes, (September, 1939), pp. 104-105. Abstracted by Earl E. Kleinschmidt, M.D.

EDITORIALS

The eight-point platform of the American Medical Association offers such a positive emphasis for the development of health activities and medical care for people of the United States as will give support to every sound school health program. We have long held that "the work of the physician and the nurse in the public schools might be developed in a manner to satisfy the most aggressive advocate of the socialization of medicine and still retain the approval of the most conservative defender of private practice and individualism.

With this platform of the American Medical Association we should ask for, and have the backing of each local medical society for such an extension of the school health program as we can demonstrate the need for. A school health program, following the policies outlined by the Committee on School Health Policies of our Association at the Pittsburgh meeting, should certainly win the support of the local medical profession. Items 4 and 5 of the American Medical Association Platform should be a stimulus to every school health worker to make clear the needs and to present them to the local medical society for an aggressive support. These statements should provide a particularly ready response for the members of the American School Health Association, because we, too, approve:

4. "Development of a mechanism for meeting the needs of expansion of preventive medical services with local determination of needs and local control of administration."
5. "The extension of medical care for the indigent and the medically indigent with local determination of need and local control of administration."
8. "The expansion of public health and medical services consistent with the American system of democracy."*

A program carried out according to the policies promoted by our Association through their Committee on School Health Policies, will find a ready acceptance by physicians concerned with the sentiments expressed by the Trustees of the American Medical Association for the protection of our democratic system of government. Officers of our Association have expressed themselves in sympathy with the Report of the White House Conference which stated: "Any policy which does for the individual what he can do for himself leaves him more dependent and less able and willing to care for himself when the protective hand is withdrawn." And also the other statement: "The test of the effectiveness of the school health program is not so much what is done about health during the years while the child is in school as the extent to which proper health attitudes persist and dominate throughout life." H. H. M.

* Journal of the American Medical Association, December 2, 1939, p. 2060.

Should high school faculties use their own brains? The vast majority of interscholastic athletic competition at the secondary school level is based on a servile and more or less stupid exact copying of the rules for intercollegiate athletic competition. In most sports this is not especially harmful. In basketball and in football it may be, and often is, dangerous and harmful. So far as basketball is concerned, the matter has been discussed in previous editions of The Journal of School Health (February, 1938, p. 49, p. 51; May, 1939, p. 147; November, 1939, p. 285).

The November, 1939, issue of "Hygeia," p. 984 carried an article entitled "Revolution in Football," by Alfred E. Parker, and contains these paragraphs.

"And after all, why shouldn't high school coaches have something to say about the rules governing the players on their teams? Why should high school teams follow to the letter the rules of football as set up by college coaches? There seems to be but one logical answer: High school football should be adapted for high school players.

"The game, as administered by the National High School Athletic Associations, is still American football; but it is football adapted for immature boys. And certainly one of the objectives of the Interscholastic Football Rules Committee has been to plan the rules so that injuries may be reduced to a minimum. In fact, the committee states that during the last several years thirty-two measures have been adopted in the interests of safety." C. H. K.

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Frequently, this Journal contains abstracts or notes dealing with the spread of communicable disease by means of unpasteurized milk, infected and inadequately cooked pork, or infected food handlers. These reports are so common in public health literature that a little thought convinces one that health education is, in this regard, a lamentable failure.

Are we so blinded by our efforts to teach propagandized material that we neglect more important factors? The soap people cry to high heaven about washing the hands, manufacturers shout for more vitamins, we are bombarded with statements that every child should drink a quart of milk per day—although the pediatricians tell us that a normal child does not need that amount added to his other food.

Cities and large towns can—and usually do when not too much under the thumb of financially interested political dictation—protect themselves by pasteurization ordinances, but they cannot prevent their stupid and uninformed people from buying sickness and death outside the city or town limits. A state law requiring pasteurization would be impractical—except in a few states of great density of population.

Would it not be wise to shift some of this stimulated emphasis to teaching about the need and how to secure food that is sanitarily safe? Seemingly, what we need are state-wide campaigns to inform the public. To be effective, there should go with these curricula in the schools, public and private, that would create a mental attitude, making it unprofitable to bootleg unpasteurized milk, garbage fed hogs, or to employ diseased persons.

C. H. K.

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ABSTRACTS

The Stammerer in School,*—All speech consists of the production of vocal tone in the larynx and the formation of words by movements of the mouth while the vocal tones pass through and out of it. A stammer is an attempt to form words without the vocal tone out of which they must be formed if speech is to be normal.

Opinions differ widely as to the cause of the stammering habit. Some authorities state that excessive speed is the determining factor which causes the breakdown in the coordination of voice production and word formation. The fact that most stammerers can sing fluently indicates that as long as the production of vocal tone is uppermost in the mind the formation of words will present no difficulty. As long as the child controls his voice in speech as he does in song his difficulties will vanish. That the vocal cords are not under direct control and can only be controlled by a mental picture of the sound desired is a fact realized by every doctor.

Another school of thought looks upon a stammer as a symptom of general nervous disturbances, as the result of nervousness, not the cause of it. Correction on these lines is carried on at some of the hospitals for nervous diseases.

Whether the stammer is the cause of fear, or fear the cause of the stammer, cannot be proved, but it is indisputable that each acts and reacts on the other causing a vicious circle. Why should a child nervously anticipate a speech breakdown until it has happened? On the other hand, what is more calculated to induce nervousness than to be subject to an intermittent breakdown of speech which it is impossible to conceal?

This brings us to the consideration of the teacher's share in effecting the correction of the stammering habit. Speaking slowly, firmly, and smoothly will enable any stammerer to speak fluently. When he breaks down it is his vocal tone that will have failed; he will be rushing to get over what he thinks is the difficult word, with the result that there is insufficient tone to "carry" the word. "Slowly" does not mean ponderous speech, but speaking without hurry. "Firmly" means the tone that gives an impression of

* H. St. John Rumsey, Speech Therapist and Lecturer at Guy's Hospital.

decision and efficiency. "Speak as you sing and sing as you speak" is a golden rule for both speakers and singers. For stammerers it is vital. By "smoothly" is meant the carrying on of the tone from one word to the next; the words should be linked together by continuous vocal tone throughout each phrase.

As to the objection that it is impossible for a schoolmaster to devote so much time and thought to correction of one stammerer, the fact is that all children will benefit if they are taught to speak slowly, firmly, and smoothly; this is the advice given to all who wish to do verbal justice to themselves and their work. Men who have ambition are realizing more and more the importance of speaking well. In the teaching profession the value of clear speech cannot be overestimated. An authoritative voice is a great aid to the maintenance of discipline, and unless discipline is assured, quick and effective teaching is obstructed.

The psychological importance of speaking slowly and firmly is not yet widely realized. Nothing corrects nervousness and increases self-confidence more than speaking slowly in a firm voice. There are three standards of good speech. First, to speak slowly enough to be heard without effort; secondly, to be so easily heard that one can be understood without effort; thirdly, to be so easily heard that the most important points in the subject matter can be remembered.

Speaking slowly and firmly will assist all in their work and it will give the stammerer freedom from a nerve-racking disability.
World Education, November, 1939, p. 490. As condensed from The Schoolmaster & Woman Teacher's Chronicle, August 10, 1939. Published in London.

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Stammerers,—The incidence of stammering among Liverpool elementary school children examined at routine inspections amounted to 0.52 per cent in 1938, 208 stammerers being discovered by the School Medical Officers. In his latest annual report as Medical Officer of Health, Dr. W. M. Frazer, O.B.E., states that before such children are admitted to the special classes for treatment they are given a general examination, and the parents are advised regarding general health and hygiene and of any physical defects which may be contributory factors in the causation of the stammer.

It is explained to both children and parents that improvement is invariably slow, and that the rate of progress, under treatment, is dependent upon the personal efforts and perseverance of the children, and the parents are asked for their cooperation.
The Schoolmaster & Woman Teacher's Chronicle, London, August 17, 1939. World Education, November, 1939, p. 491.

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The Training of the Health Educator,—Measures employed in the classroom for the training of elementary school teachers while in service involve the use of four definite procedures in Cleveland.

1. The Health Inventory.—To create awareness of health problems existing in the classroom we ask each teacher to conduct a health inventory of her pupils during the first two months of the semester. To facilitate this, mimeographed material describing the exact procedure is placed in the hands of every teacher. Incidentally, this same material constitutes Unit I of our Course of Study.

2. Homeroom Visits by the School Physician.—When the health inventory has been made, each teacher is notified by her principal that on a certain day and time the school physician will visit her room to consult with her about her findings, and to discuss with her the health of others about whom he may be concerned. This is one solution of the problem of getting attention for those who need it.

3. Regular Weighing Program.—In addition to the health inventory, which is a semester affair only, each teacher is asked to weigh her children monthly and allow them to record such growth records in graphic form.

4. Course of Study.—Having obtained an insight into individual health problems and variations in rate of growth by the health inventory and weight records, the teacher is then provided with a course of study which presents definite procedures in health instruction by half grades. The purpose of this definite assignment is fourfold—

(a) A definite assignment by half grades prevents overlapping of materials.

(b) Focusing all available time each semester upon a single phase of health activity makes for firm foundation of actual knowledge and eliminates superficiality.

(c) Definite assignments ensure proper use of the scant time available in each program.

(d) Definite assignments in descriptive unit form give untrained teachers actual material with which to work.

There is a new field opening in senior high schools, however, the qualifications for which cannot be clearly stated at this time. It is our belief that late in the senior high school there should be courses which for the lack of a better name may be called "Clinics on Personal and Social Problems." Courses in which we should discuss the basic principles of human behavior, that is, how human beings behave and why and how to do it successfully.

The second phase of the clinic should concern itself with the problems of marriage, parenthood, and psychology of sex.

As school health and health department practices develop, certain facts with respect to health education are gradually becoming apparent:

1. The great body of classroom teachers are in a position to make an incalculable contribution to the health of the nation's children.

2. In addition to adequate training for classroom teachers, there must be health education leadership in the hands of a capable director of health education or health education coordinator if the program is to operate effectively.

3. The health education program in the community (the home) and in the schools (the classroom) are sufficiently interlinked and can become so mutually contributory that a closer relationship between the two should be established.

Certain principles with respect to the training of health educators would receive general or uniform support from the utterances of the White House Conference, the criteria for health teachers set up by the State Department of Education in Nw York, the Report of the Committee on Training and Personnel of the American Public Health Association, and the training plans being carried forward in Tennessee and other state areas:

1. The health educator or health education coordinator should have at least the Master's degree or the Certificate in Public Health in this field. More important positions will often command the services of an individual with the Doctor of Public Health, Doctor of Philosophy, or Doctor of Education in Health Education, or the Doctor in Medicine degree with a special training in education and school health.

2. Training in education will be at least that required for the classroom teacher with at least two years of teaching experience in the classroom.

3. Training in the understanding of the child with respect to his physical and mental health will involve training in physics, chemistry, and biology, upon which will be built anatomy, physiology, mental hygiene, nutrition, and perhaps pathology.

4. An understanding of the community health program involves a basic knowledge of the family and of such public health subjects as public health bacteriology, communicable disease control, vital statistics, sanitation, public health organization, and adult health education.

5. A thorough knowledge of the school health program for this individual involves training in school health administration including the aims, objectives and types of activities of all of the school health specialists, the hygienic arrangement of the school day for the child, and thorough training in health education.

We do not propose to name subjects or specify requirements by course, but we do propose the recognition of the minimum degree standard suggested above and the recognition of the need of sound training in (1) education, (2) personal health, (3) the maintenance of a healthful environment, (4) community health organization and activities, (5) the school health program and its interrelationships. C. E. Turner, Dr. P. H. and Philip L. Riley. The Journal of Health and Physical Education, January, 1938. Abstracted by E. E. Kleinschmidt, M.D.

Hard-of-Hearing Children,—The average person does not recognize a hard-of-hearing child. A comparatively small group of people knows that there is a hard-of-hearing child, as distinguished from a deaf child. A person who can hear, but who doesn't hear well is mistakingly called "deaf." The average teacher may have in a class a seriously impaired child and not be aware of it. Thousands of hearing defective children pass through health inspection lines without detection. Children may live their entire school careers without official recognition of a serious hearing handicap. Such children have often been called mentally dull, or slow, or peculiar, and thereby have been unjustly classified with resultant mishandling. The inevitable result is an untrained mind, a warped personality, and an asocial person, inadequately prepared for citizenship or self-support; a person without self-respect or security.

Warren H. Gardner, Ph.D. The American School Board Journal, 99 (November, 1939), 42-44. Abstracted by Earl E. Kleinschmidt, M.D.

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Hearing Defects Traced to Infections,—Gardner* reports from a hearing survey conducted in his clinic, a close relationship between infections of the nose and throat and hearing difficulties. From studies made with the group audiometer he finds that of all children found defective in hearing:

75-90 per cent report a history of ear troubles
60-80 per cent report a history of earaches
30-40 per cent report a history of running ears
10-18 per cent have running ears at the time of the test
50-60 per cent report ear noises
20-25 per cent report hard-of-hearing relatives
35-40 per cent report chronic colds
20-25 per cent breathe through their mouths
30-40 per cent have suspicious tonsils
10-20 per cent have wax or debris plugging the outer canal
60-80 per cent have scars on their drum membranes.

* Warren H. Gardner, Ph.D. The American School Board Journal, 99 (November, 1939), 42. Abstracted by Earl E. Kleinschmidt, M.D.

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Nullification,—Excellent didactic lessons in the value of vitamins and minerals are nullified by a school cafeteria stocked with pastry, hot dogs, and caffeinated soft drinks; beautiful ideals of cleanliness to be compared by the children with antiquated dirty washrooms without soap or towels; lessons in eyesight conservation read out of books, printed in small type on glossy paper, in rooms inadequately lighted. We must organize our health instruction so that what we do shall not shout so loud that our students cannot hear what we say. William W. Bauer, Director, Bureau of Health and Public Instruction, of the American Medical Association. School Management, December, 1939, p. 96.

Let There Be Light!*,—Throughout the years various standards of illumination have been proposed for schoolroom lighting. Several of these proposed standards have been supported by partial studies purporting to show the adequacy of the proposed standards.

Dr. Frank Freeman,[1] in a study made in 1925, found that legibility increased up to about three foot-candles, but found little difference between three and seven foot-candles of illumination as an aid to seeing. He also found that more light was needed by children than by adults. He found wide variations in light intensity at various pupil stations throughout the room, and even greater variations at the same stations in different seasons and under different weather conditions. Realizing the lack of adequate illumination from natural sources, he recommended further studies on lighting standards and light controls.

During the last ten or fifteen years several studies, such as the ones at Tuscumbia, Alabama[2]; Lebanon, Pennsylvania[3]; Cambridge, Massachusetts[4]; and Chicago, Illinois[5], have been made to determine the intensity of light needed in schoolrooms. Most, if not all, of these studies have indicated a need for greater illumination than that considered in the Freeman report.

Growing out of these studies and backed by the findings and opinions of illuminating engineers, new lighting standards, proposed by the Illuminating Engineering Society and the American Institute of Architects, were adopted in February, 1938, by the American Standards Association. These standards[6] for minimum illumination increased the 1932 standards about as follows: for classrooms, from eight to fifteen foot-candles; for assembly halls and auditorium units, from three to six foot-candles; for sewing rooms, from ten to twenty-five foot-candles; for gymnasium areas, from eight to fifteen foot-candles; and for locker rooms and corridors, from two to four foot-candles for artificial illumination.

Following the publication of these recommendations, the proponents and opponents of the new proposed standards almost immediately divided into about three groups. One group was composed of interested parties who had something to sell or who had something to do with the development of the new standards, together with others who were not satisfied with old practices and who were willing to accept on faith the standards proposed by a group of specialists in this field. A second group was composed of those immediately ready to denounce the new standards as trade propaganda, claiming that the new standards were not justified on the basis of need or of the cost involved. A third group of people preferred to withhold approval or disapproval, until they had proof of the value of the new standards. This group wished

* N. E. Viles, Director, School Building Service, State Department of Education, Jefferson City, Missouri.

to weigh the cost of meeting the increased standards and to compare this cost with the values to be obtained. The whole controversy has probably developed more heat than sound reasoning on the problem of schoolroom illumination.

In a study conducted during 1936 in School No. 18 in Troy, N. Y.,[7] under the supervision of Dr. W. W. Coxe of the New York State Department of Education, a program was set up to determine the value of illumination beyond twelve foot-candles. One room had 200-watt semi-indirect light fixtures, so regulated as to give twelve foot-candles of light at each pupil station. The second room had 500-watt indirect fixtures, so regulated as to give twenty-five foot-candles of light at pupil stations. Both rooms were controlled by photo-electric cells. New fixtures were installed. The fixtures in both rooms were kept clean and the amount of current used was measured carefully. The rooms were similar. The same teachers were used. Pupil ability and achievement were carefully evaluated by the use of a comprehensive battery of tests. Telebinocular tests of eye conditions and opthalmograph measurements of eye movement in reading were made. Behavior-rating tests were given to show pupil reaction. Motion pictures were made at various times to show behavior and action. Tests were repeated at six-month intervals.

So far as those in charge could determine, there seemed to be no appreciable gain for the pupils in the room with twenty-five foot-candle illumination over those in the rooms with twelve foot-candles.

From estimates that have been provided[8] it seems that in an elementary schoolroom with direct or semi-direct lighting units and with a floor area of about 660 square feet the change from the 1932 to the 1938 standards will call for an increase of about 660 watts. In a sewing room of equal size the increase will be about 1320 watts. In a gymnasium with an area of 3600 square feet the increase will be about 3600 watts.

In the Troy, N. Y., test the average cost per week for lighting current in the room with a 12 F. C. standard was $0.856, while in the room with a 25 F. C. standard the average cost was $2.498. While the 25 F. C. level is above the present recommended standard, it is evident that in this case the increased illumination would entail an added cost of $59.11 per room for a school year of thirty-six weeks.

In setting up their standards, the illuminating engineers and experts may have overlooked such important factors as the morale of the schools; the reaction of the teacher; the long-time effect of the high-pressure activity (which is supposedly possible under great illumination) on the nervous system of the child; and the cost of more lighting in comparison with other essential services in the school.

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From the School Executive, December, 1939, p. 17. Abstracted by C. H. Keene, M.D.

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Physical Defects and Scholastic Standing,—Woofter studied the relation of disease and defects to scholastic standing of 360 unselected students near the same age from various primary schools. The grades were obtained for the previous semester and classed accordingly as excellent, good, fair, and poor. A separate list was compiled demonstrating the defects of each child. In plotting grades of the same number of students it was found that excellent students were absent an average of two and one-half days while poor students lost twelve and one-tenth days. This observation is again borne out by contrasting the number of children with infected tonsils having excellent grades, which is 10.5 per cent, with those of poor standing, 31.5 per cent. Among 159 students having normal tonsils, 18.2 per cent could be classed as excellent and 16.3 per cent as poor. Therefore infected tonsils can be considered detrimental, if for no other reason than loss of time from school. One group of 230 students contained 152 with unclassified defects, minor or major, with an increase of 25.5 per cent among the poor students over those of excellent standing. Serious eye defects are apparently the greatest scholastic handicap a student can have, since only 4 per cent having a visual acuity of 20/40 or worse were excellent students, while 44 per cent had a poor scholastic standing. With normal vision, 16.8 per cent were doing excellent work and 17.6 per cent poor. Of 231 unselected students, 24.5 per cent of the excellent students had eye defects as contrasted with 40 per cent of those doing unsatisfactory school work. Testing with the Betts eye view apparatus revealed a variation of from 50 to 75 per cent of failures to have defective vision. Malnutrition, that is, a weight of 6 pounds (2.7 Kg.) or more below the accepted normal for the height and

age of that particular child, cannot be regarded as serious, except that underlying physical or environmental conditions should be corrected. The curve for these children is somewhat less satisfactory than the class average. The relation of deafness to class standing could not be definitely studied as only sixteen cases were discovered, but only a few of these are known to be doing unsatisfactory work. There was such a small group of children with speech defects that no conclusions could be reached. Preliminary Survey on Relation of Physical Defects to Scholastic Standing. A. C. Woofter, West Virginia Medical Journal, Charleston, September, 1939, p. 413. Abstracted in Journal of the American Medical Association, October 28, 1939, p. 1677.

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Exercise, An American Fetish,—Many, when younger, exercised vigorously and participated in competitive games; but they try to keep up such activity as they grow older and often do themselves injury. The temptation to keep on is great. Most men and women cling tenaciously to the idea that they are exceptions to the normal aging process. It is a sad sight to see older men or women wending their way in from tennis courts or golf links, weary of foot, drawn in expression, their faces flushed or ashen, foolishly proud to be able to declare that at 60, let us say, their activities are unabated. Throughout our land such a picture greets the eye almost daily at country clubs and on golf courses. These people lack either the sense or the courage to admit that they are growing older and that former activity is becoming increasingly fatiguing. They persuade themselves that such exercise is necessary for their well being. In fact, a progressive decrease in bodily exertion is what they need.

Most harmful of all is periodic, irregular, vigorous exercise. Most pernicious is the habit, so common in American, of the week-end or all-day golf game or other exercise on the brief vacation with the days filled with incessant activity, often when the individual ordinarily leads a life nearly devoid of physican exertion. All too often people collapse or die as the result of unwonted exertion or precipitate an attack of serious heart disturbance, which then necessitates weeks of enforced rest.

Present tendencies to make of exercise a fetish in all probability contribute much to the premature breakdown in so many Americans. Various forms of heart failure cause more deaths in persons past 50 than any other cause. This makes it highly important to avoid the strain on the circulatory system that results from excesses of exercise. With advancing years wisely moderate bodily exertion. Exercise, An American Fetish, by Henry A. Christian, Hygeia, November, 1939, p. 968. Abstracted by C. H. Keene.

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Cafeteria as a Teaching Medium:—"There is no better practical method for teaching the essentials of a proper diet to school

children than in the school cafeteria," comments Dr. Wilson G. Smillie, Director of the Department of Public Health at Cornell University Medical School.

While calling attention to the importance of the cafeteria as a teaching situation, he warns against the selling of cheap candy, soft drinks, and other foods of an unsuitable type in order to make a profit for the cafeteria. Such practices can only result in misunderstanding.

The primary purpose of the school cafeteria, he points out, is not to turn in a surplus to the school treasury. Instead, the real purpose is twofold in nature:

1. To supply the children with a good wholesome meal at cost.
2. To teach, by example and precept, the essential principles of a well-balanced diet, which will contain all the essential food elements in appropriate amounts. Wilson G. Smillie, M.D. The Nation's Schools, (November, 1939), p. 34. Abstracted by Earl E. Kleinschmidt, M.D.

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A School Dental Clinic:—The care of a child's health is of major importance in a community—a common interest for parents, teachers, doctors, and nurses. When the need for community cooperation is shown sufficiently, it is probable that the people will respond.

This statement is well supported by the action of the people of the town of Greece adjoining Rochester, New York. It was found that there was great need for dental care of children in the schools. When the county dental hygienist examined the teeth of the public school children several years ago, 90 per cent were found in need of dental care. Parents of many of these children had neither the inclination nor the financial means to correct the situation.

As a consequence public-spirited and health-minded citizens of the town, representing churches, parent-teacher organizations, and town officers, perfected an organization to meet the need of giving dental care, the nucleus for what later developed into the Greece Dental Clinic. Civic groups held card parties and similar affairs to provide money for the first dental clinic. School trustees, sceing the value of these clinics, also responded to the request that the district help in financing the work.

The results of the clinic may be stated briefly as better health; better attendance; better school work; an aroused interest by the child and the parent in the value of preventive and corrective dentistry; an economical saving to the taxpayers of the school district; and less likelihood of future citizens becoming community charges as a result of illness caused by teeth infection in their youth. G. E. Mathews, President, Board of Education, Greece Central School, Rochester, New York, and B. W. Kinsella, Vice-Principal, Greece Central School, New York. Journal of the National Education Association, (November, 1939), p. 242. Abstracted by Earl E. Kleinschmidt, M.D.

Survival of the Unfit,—Medicine has alleviated suffering and prolonged life, but it has, in so doing, also prolonged suffering and nullified the purging effects of natural selection. It has saved hundreds of thousands of debilitated organisms which are adding to the burden of society by reproducing more and worse offspring.

Abstracted in the New England Journal of Medicine, November 23, 1939, p. 836. Ernest A. Hooton, "The Wages of Biological Sin," The Atlantic Monthly, 164:435-445, 1939.

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Care for Handicapped Children,—The American Academy of Ophthalmology and Otolaryngology at its annual meeting in Chicago in October adopted a resolution urging that funds be provided by foundations and other appropriate agencies to give attention to children with visual, hearing, and speech defects. The resolution recommended that adequate programs be instituted to detect these deficiencies, which constitute an actual or threatened handicap to school children, and to provide, through the cooperation of qualified specialists in national, state, and local medical societies, appropriate medical care for indigent and underprivileged children who may be afflicted or threatened with such handicaps. The American Laryngological Association passed a similar resolution at its recent meeting. Journal of the American Medical Association, November 18, 1939, p. 1889.

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REVIEWS

High Schools and Sex Education,—By Benjamin C. Gruenberg, Special Consultant to the United States Public Health Service, with the assistance of J. L. Kaukonen, United States Public Health Service, Pamphlet, 129 pp. Superintendent of Documents, Washington, D. C. 20c. 1939.

A new and completely revised edition of a manual by the same title prepared by Dr. Gruenberg and others under direction of the United States Public Health Service in 1922.

This very excellent manual should be in the hands of every school administrator and school medical director. The title "High Schools and Sex Education" is misleading and does not do the manual justice since the authors definitely redefine Sex Education on a broad basis of education of the personality of "the whole child" and of a social and socializing process; or in other words education in both mental and social hygiene. A better title would be "Social and Sex Character Education for High Schools."

Part I of the Manual gives all the data necessary for organizaing and planning instruction in social and sex character education that can be welded into and developed as an integral part of the entire public school program. It answers the many questions of Who should do it?; Qualifications of Teachers?; Segregation of the Sexes?; Should Teachers and Pupils be of the same Sex? etc.

Part II of the Manual shows how Sex Education can be made

an integral part of the Biology Course; the General Science Course; Physiology and Hygiene; Physical Education; Home Economics; The Social Studies; The English Course. A generous bibliography follows each of ten chapters.

It is interesting to note the statement of the Surgeon General and the Commissioner of Education in the foreword. Both would like the parents to assume the responsibility for sex education; but since the parents have failed and are turning to outside agencies for help; they are now ready to have the schools assume the greatest responsibility for sex education.

Surgeon General Thomas Parran says "What sex education should consist of, how and by whom instruction should be given and the part to be played by the schools in their role of adjunct to the home, are questions which cannot be finally answered in this publication."

J. W. Studebaker, Commissioner of Education, says in the foreword "That education in the field of sex and the social relations involved therein is largely obtained by chance or mischance and there seems to be little objection to such haphazard learning from unreliable and undesirable sources. Otherwise, long ago we would have done more about it in the program of our schools." He goes on to say, "The only excuse offered for our omissions in this fundamental phase of preparation for living is that sex education should be carried on in the home, but unfortunately many parents are not prepared for such teaching."

An editorial in the Cincinnati Post in November, 1939, says, "High Schools and Sex Education" ought to be a national best-seller. Those who buy it, expecting snappy reading material, will be disappointed. It is a serious discussion, intended primarily for teachers." "Most parents and citizens, we believe, will regard the Public Health Service's bold attack on the old taboo as a major move toward better national health, mental, physical and social."

The reviewer feels that the majority of the public is now ready for the schools to assume an active role in Social and Sex Character Education. It behooves all school administrators to get behind this movement and urge and support teacher preparation.

RICHARD W. WEISER, M.D.

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Supervision in Public Health Nursing. By Violet H. Hodgson. The Commonwealth Fund, New York, 1939. Pp. 376. $2.50.

This text is designed for the instruction and guidance of the supervisor. The purpose of supervision is to promote the professional group of the person or group supervised. In teaching, its purpose is to improve the methods of teaching, the teaching, and the curriculum. In the nursing field, it is to promote a better program, to improve cooperation, and to make more effective the procedures used, to drop old and to add new activities, if needed.

This text is well qualified to do these things. It traces the history of supervision in public health nursing, discusses the requirements and philosophy of supervision, and its organization and administration. It surveys principles and methods, and goes into the planning of the program.

About three-fifths of the material is devoted to studies of field work and of various devices of supervision, such as group conferences, records and reports, the special procedures with new nurses and with volunteers, and the purpose of the special supervisor, who sometimes has to be used, especially where the specialized nursing program is in a process of transition into the generalized one. One chapter is devoted to the supervision of industrial and of school service. This charts the different types of organization needed with different methods of control, e.g., Education Department or Health Department or cooperation of these with one another or with other agencies.

This is an excellent text, based on long and splendid experience.

CHARLES H. KEENE, M.D.

MEETINGS

American Association for Health, Physical Education, and Recreation, Chicago, April 24-27, 1940.

American School Health Association and American Public Health Association, Detroit, October, 1940.

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